CLAIM AMENDMENTS

1. (currently amended) An isolated genomic polynucleotide, said polynucleotide obtainable from human chromosome 7 having a nucleotide sequence at least 95% identical to a sequence selected from the group consisting of:

(a) a polynucleotide encoding a polypeptide selected from the group consisting of human SNARE YKT6 depicted in SEQ ID NO:1, human liver glucokinase depicted in SEQ ID NO:2, human adipocyte enhancer binding protein depicted in SEQ ID NO:3 and DNA directed 50kD regulatory subunit (POLD2) depicted in SEQ ID NO:4;

(b) a polynucleotide selected from the group consisting of SEQ ID NO:5 which encodes human SNARE YKT6 depicted in SEQ ID NO:1, SEQ ID NO:6 which encodes human liver glucokinase depicted in SEQ ID NO:2, SEQ ID NO:8 which encodes human adipocyte enhancer binding protein depicted in SEQ ID NO:3 and SEQ ID NO:7 which encodes DNA directed 50kD regulatory subunit (POLD2) depicted in SEQ ID NO:4;

(c) a polynucleotide which is a variant of SEQ ID NOS:5, 6, 7, or 8;

(d) a polynucleotide which is an allelic variant of SEQ ID NOS:5, 6, 7, or 8;

(e) a polynucleotide which encodes a variant of SEQ ID NOS:1,2, 3, or 4;

(f) a polynucleotide which hybridizes to any one of the polynucleotides specified in (a)-(e)

(g) a polynucleotide which is a reverse complement of the polynucleotides specified in (a)-(f);

~~(h) a polynucleotide selected from the group consisting of a polynucleotide which encodes human SNARE YKT6 with exons as depicted in Table 1, a polynucleotide which encodes human liver glucokinase with exons as depicted in Table 3; a polynucleotide which encodes human adipocyte enhancer binding protein with exons as depicted in Table 2 and a polynucleotide which encodes DNA directed 50kD regulatory subunit (POLD2) with exons as depicted in Table 4 and~~

~~(i) containing at least 10 transcription factor binding sites selected from the group consisting of AP1FJ_Q2, AP1_C, AP1_Q2, AP1_Q4, AP4_Q5, AP4_Q6, ARNT_01, CEBP_01, CETS1P54_01, CREL_01, DELTAEF1_01, FREAC7_01, GATA1_02, GATA1_03, GATA1_04, GATA1_06, GATA2_02, GATA3_02, GATA_C, GC_01, GFII_01, HFH2_01, HFH3_01, HFH8_01, IK2_01, LMO2COM_01, LMO2COM_02, LYF1_01, MAX_01, NKX25_01, NMYC_01, S8-~~

~~01, SOX5-01, SP1-Q6, SAEBP1-01, SRV-02, STAT-01, TATA-01, TCF11-01, USF-01, USF-C and USF-Q6.~~

2. (original) A nucleic acid construct comprising the polynucleotide of claim 1.

3. (original) An expression vector comprising the polynucleotide of claim 1.

4. (original) A recombinant host cell comprising the nucleic acid construct of claim 2.

5. (original) A recombinant host cell comprising the expression vector of claim 4.

6. (original) A method for obtaining a polypeptide encoded by a polynucleotide obtainable from human chromosome 7, said polypeptide selected from the group consisting of human SNARE YKT6, human liver glucokinase, human adipocyte enhancer binding protein and DNA directed 50kD regulatory subunit (POLD2) comprising:

(a) culturing the recombinant host cell of claim 5 under conditions that provide for the expression of said polypeptide and

(b) recovering said expressed polypeptide.

7. (original) A method for preparing an antibody specific to a polypeptide selected from the group consisting of human SNARE YKT6, human liver glucokinase, human adipocyte enhancer binding protein and DNA directed 50kD regulatory subunit (POLD2) comprising:

(a) obtaining a polypeptide according to the method of claim 6;

(b) optionally conjugating said polypeptide to a carrier protein;

(c) immunizing a host animal with said polypeptide or polypeptide-carrier protein conjugate of step (b) with an adjuvant and

(d) obtaining antibody from said immunized host animal.

8. (original) An antisense oligonucleotide or mimetic to an isolated polynucleotide which hybridizes to a non-coding region of SEQ ID NOS:5, 6, 7 or 8, which non-coding region is selected from the group consisting of an intron, a splice junction, a 5' non-coding region, a transcription factor binding region and a 3' non-coding region.

9. (original) A method of diagnosing a pathological condition or susceptibility to a pathological condition in a subject comprising:

(a) determining the presence or absence of a mutation in the polynucleotide of claim 1 and

(b) diagnosing a pathological condition or a susceptibility to a pathological condition based on the presence or absence of said mutation.

10. (original) A composition comprising the polynucleotide of claim 1 and a carrier.

11. (original) A composition comprising the antisense oligonucleotide of claim 8 and a carrier.

12. (original) A method for preventing, treating or ameliorating a medical condition, comprising administering to a subject an amount of the composition of claim 10 effective to prevent, treat or ameliorate said medical condition.

13. (original) A method for preventing, treating or ameliorating a medical condition, comprising administering to a subject an amount of the composition of claim 11 effective to prevent, treat or ameliorate said medical condition.

14. (original) A kit comprising the polynucleotide of claim 1.

15. (original) The kit according to claim 14, in which the polynucleotide is labeled with a detectable substance.

16. (original) A kit comprising the antisense oligonucleotide or mimetic of claim 8.

17. (original)

18. The kit according to claim 16, in which the antisense oligonucleotide is labeled with a detectable substance.

Claims 18-22 are cancelled.